local news and public affairs programming. The argument is developed that a policy designed to satisfy the objectives of competition policy is likely also to satisfy diversity concerns. Further increases in diversity can only be achieved by reductions in consumer welfare.

Sections VI through VIII examine in turn each of the station ownership rules in light of the preceding analysis of relevant markets. In each case, where data are available, illustrative concentration information is provided. The conclusion of these analyses is that the Commission's present station ownership regulations are unduly restrictive, and likely result in an inefficiently small scale of enterprise for broadcast station owners.

II. The Commission's Delivered Video Services Market

A. Introduction

In order to address any of the ownership rules it is first necessary to consider the nature of the markets in which broadcast stations compete. This section and the two following ones provide analyses of the markets for video programming, advertising and program supply, respectively.

The Commission has proposed that one relevant market in which television stations compete is "delivered video programming." In providing video programming to audiences, television stations compete among themselves as well as with other providers of video programming and possibly with providers of non-video news and entertainment. Competition in this area is best analyzed on a local level, since the available alternatives vary from one location to the next. Thus, the local ownership rule is relevant to competition in this area, but the national ownership rule is not. If, as the Commission proposes, radio is not part of the market, then the radio-television cross-ownership rule is of no relevance. The radio-television rule would be relevant in a broader market that included both media, but such a market would likely include so many other participants that there would be little concern about the level of competition.

B. Product market

Commercial television stations earn their revenues by assembling audiences and selling time for advertising delivered to those audiences. In order to attract audiences, stations broadcast programming that audiences are interested in watching. One question relating to station ownership is whether increased ownership concentration would lead to a reduction in competition among stations to attract audiences. If it did, increased concentration might lead to a reduction in the quality of programming broadcast by television stations.[6] A reduction in competition could not lead to an increase in the price charged by commercial broadcast stations to viewers of their programming because their programming is "sold" to viewers at a zero price.[7]

To analyze whether increased concentration might lead to a reduction in the quality of their programming, one must define the product market in which commercial television stations compete to attract audiences. The Commission has tentatively concluded that the relevant product market in which these stations compete to attract audiences consists of commercial and non-commercial broadcast stations, cable systems and other systems that deliver video programming to the home.[8] There is ample evidence to support this conclusion. Cable television is the clearest example of a competing distribution medium. Increasingly, other distribution forms including MMDS, DBS and VDT will add to the competition.[9] Supporting evidence is presented in greater detail in Appendix A.

The competitive significance of cable, DBS and other non-broadcast video delivery modes does not depend on their adoption by all or even most television households. Cable television now passes and therefore is available to nearly all television households. Many more households have SMATV or MMDS available than currently subscribe. Although it is still in its relative infancy, DBS is available to a large fraction of all TV house-

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6 "Quality" as used in this report in reference to programming is defined in terms of the production cost of programs, which is likely to be highly correlated with their popularity.

7 Cable operators and other video providers, which it will be argued also belong in the relevant product market, charge a positive price for their programming. In addition to decreasing quality, these firms could participate in anticompetitive behavior in the market for viewers by raising price, provided either that all their subscribers are located in the local area or that it is feasible to charge a different price to local viewers than to viewers in other areas. Cable operators subject to local and federal regulation are generally prohibited from charging different rates to different subscribers.

8 *See* FNPRM, *supra* note 1, ¶ 29.

9 MMDS stands for multichannel, multipoint distribution system. DBS stands for direct broadcast satellite system. VDT stands for video dialtone; in this report it also stands for other video services provided by telephone companies. SMATV stands for satellite master antenna television.

holds. If the quality of broadcast television programming available to the viewers in a community were to decrease significantly, each of these provides programming that is an alternative to broadcast television. It is the presence of these alternative delivery systems and their ability rapidly to take dissatisfied viewers away from broadcast television that is important, not their present scale of operation. Further, the fact that these alternative media are not available to each and every TV household in a given viewing area does not mean that they provide ineffective competitive restraints on broadcasters. Broadcasters cannot discriminate between those viewers who have and those who do not have competitive alternatives. Hence, those viewers who do have alternatives, if sufficient in number, protect the interests of those who do not.

The Commission tentatively concluded that the viewing of video cassettes is not part of the relevant product market. In other words, the Commission believes that viewers of broadcast television would not significantly turn to viewing video cassettes, whether rented or purchased, in response to a hypothetical decrease in the quality of programming offered on local broadcast stations. The Commission has noted that, unlike broadcast and cable television, video cassettes do not offer a full schedule of video service.[10] The important analytical question is not whether viewers could completely replace broadcast viewing with the viewing of video cassettes, as the Commission's rationale seems to imply, but whether a hypothetical decrease in quality or increase in price would cause significant substitution from broadcast viewing to the viewing of video cassettes. Households typically do not have enough video cassettes on hand to "program" the entire viewing day for an extended period of time. However, just as broadcast and cable television are available throughout the day, any VCR household can watch a rented or purchased video cassette any hour of the day. It is hard to argue that a family sitting down to watch a video cassette movie during prime time is not in many or most cases substituting this programming for broadcast or cable programming, or that morning viewers of a Jane Fonda exercise videotape

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10 *See* FNPRM, *supra* note 1, ¶30.

are not doing the same. Further evidence of substitutability of video cassettes and broadcast television programming is presented in Appendix A.

The Commission has also tentatively concluded that broadcast and cable television and other distributors of video programming do not compete for their audiences with any non-video medium.[11] In other words, the Commission denies that a small but significant and non-transitory reduction in the quality or increase in the price of video programming would lead to a significant decline in audiences for such programming. Thus, the Commission does not believe that the quality of broadcast video programming is constrained by the ability of viewers to substitute such activities as listening to the radio or CDs, reading newspapers and magazines and playing computer games. The evidence on which the Commission based this conclusion may be inaccurate. Even if accurate, it would not be an appropriate or sufficient basis to conclude that non-video media do not compete with broadcast television in attracting an audience.

The Commission cites figures purporting to show that the percentage of leisure time (not number of hours) the average household spends watching television has changed little between 1970 and 1988. Other data on the use of leisure time do not support this conclusion. For example, the Americans' Use of Time Project has gathered survey data on time use in 1965, 1975 and 1985.[12] According to the Project's figures, the average time an adult spent watching television increased markedly from 1965 to 1975, from 10.5 hours to 15.2 hours, then declined slightly to 15.1 hours in 1985. As a percentage of total leisure time, 30 percent, 40 percent and 38 percent was spent watching television in these three years. Thus, there is reason to doubt the alleged constancy of television watching as a percentage of leisure time, on which the Commission based its conclusion.

The Commission tentatively concludes that its information on the use of leisure time demonstrates a low cross-price elasticity among television

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11 *See* FNPRM, *supra* note 1, ¶24.

12 Blaine Cutler, *Where Does the Free Time Go,* AMERICAN DEMOGRAPHICS MAGAZINE, Nov. 1990.

viewing and other activities.[13] Even if one had undisputed information on television viewing as a percentage of leisure time, this would not be sufficient or even especially relevant to computing the relevant cross-price elasticities. The relevant quantity is the amount of time spent watching television, which has not remained constant. For instance, according to a later edition of the source the Commission cites, average hours of television viewing per week increased 20 percent, from 1,226 to 1,470, between 1970 and 1990.[14] More price information is needed to calculate elasticities than a passing assertion that relative prices must have changed over time. Furthermore, one would need to take account of the many factors other than price that have changed, including the amount of leisure time, the level of income and the quality and diversity of television programming. It is simply not possible without more rigorous analysis to determine how sensitive (or allegedly insensitive) television viewing is to changes in the prices of alternative activities.

C. Geographic market

Though unproven, it will be assumed for purposes of this discussion that non-video media and other leisure activities do not belong in the relevant product market. Television stations, cable systems, MMDS, DBS and other satellite services and video rental and sales outlets provide video programming to consumers across the country. For an individual consumer, however, the set of relevant suppliers are those providing service in the consumer's local area. The purpose of defining a geographic market is to identify those firms to which a consumer can reasonably turn.

A more detailed analysis of the relevant geographic market for video services is presented in Appendix B. In a typical case, viewers can obtain video programming from a number of commercial and non-commercial broadcast stations with relatively similar service areas, as well as from cable and other sources discussed above, all of which should be included in the local market. Some viewers in the area may also be able to receive

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13 *See* FNPRM, *supra* note 1, at n.40.

14 *See* HAROLD L. VOGEL, ENTERTAINMENT INDUSTRY ECONOMICS 9 (1994).

broadcast signals from stations located outside the area. Of particular interest is a station in another community with a Grade B contour that overlaps the Grade B contours of local stations. Whether this station should be included in the local market depends on the degree of overlap. If the overlap is small and most viewers in the local area cannot receive programming from the outside station, it is unlikely that the actions of broadcast stations and other video providers located inside the community would be significantly restrained by the outside station. In that case, it may be appropriate to exclude the outside station from the relevant geographic market for viewers.

Many local circumstances are important in defining the proper geographic market in which to consider the competition for viewers in a given locale. Markets for advertising and the purchasing of video programming, considered below, also have important local components, and the structure of local markets is relevant to evaluation of several of the Commission's proposed changes in ownership rules. It is beyond the scope of this report to examine each issue in every local area. Instead, five DMAs were chosen as "illustrative" of the entire range of DMAs.[15] To select these five, all DMAs were ranked according to size (number of television households), and the list was then divided into quintiles, each of which included DMAs covering 20 percent of television households. For each quintile, a DMA was selected that was close to the median for the quintile based on number of full-power television stations, cable penetration, VCR penetration and number of television households. The selection of the five DMAs among those close to the median values in each quintile was also influenced by an attempt to achieve broad geographic diversity. Table 1 shows the "illustrative" DMAs chosen.

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15 DMA stands for the Nielsen Designated Market Area.

Table 1 DMAs used for illustrative analysis of local markets and concentration

DMA	Rank	TV households (mil.)
New York, NY	1	6.72
Cleveland, OH	13	1.46
Portland, OR	25	0.92
Richmond-Petersburg, VA	54	0.49
Amarillo, TX	130	0.17

In each of these five DMAs, one example of Grade B overlap was examined in detail. First, the commercial station with the largest Grade B contour was identified in the main city in each of the five DMAs. For each of these five stations, the station outside the city was identified that had the largest overlap of Grade B contours without an overlap of Grade A contours. Joint ownership of such stations would be prohibited under current Commission rules, but would be allowed under the Grade A standard that the Commission has proposed. In these five illustrative cases, an estimated 4 to 31 percent of the households in the first station's Grade B contour also lay within the Grade B contour of the outside station. Since these station pairs were chosen to maximize the Grade B overlap, these results suggest that in most cases stations without overlapping Grade A contours do not significantly compete to attract an audience.

D. Concentration and competition

Table 2 presents two estimates of viewer concentration in each of five illustrative DMAs, assuming for the sake of argument that the viewing of video programming is a relevant product market. The evidence summarized in Section II.C above (and in greater detail in Appendix B) suggests that distant stations may not be part of the same local market in competing for viewers. Accordingly, both estimates in Table 2 look at viewing in a local market, assumed to include all broadcast stations and cable located in the DMA. The first set of HHIs is based on the assumption that each station has approximately the same potential to attract an audience as any other station in its DMA.[16] To compute the HHI, each broadcast station is assigned an equal weight, and cable is treated as an additional "station."

Table 2 Estimated viewer HHIs in five illustrative DMAs[17]

DMA	Number of full-power broadcast stations in DMA	Equal shares HHI, broadcast stations and cable	Viewing shares HHI, broadcast stations and cable
New York	20	476	1,478
Cleveland	14	667	1,617
Portland	10	909	1,808
Richmond	7	1,250	2,050
Amarillo	5	1,667	2,003

The second approach in Table 2 uses information on actual viewing. Viewer shares are assigned to broadcast stations based on their November 1994 ratings.[18] Ratings reflect viewing in the entire DMA, because this is the form in which viewing information is normally available and used by the industry. Stations receiving a rating below 0.1 (when rounded) are excluded. Cable operators are assigned a single share based on the combined ratings received by cable networks in that DMA. Share estimates for other significant video distributors, including video cassettes, DBS and MMDS, are not available and are therefore not included, which tends to make the estimated HHIs overstate the degree of concentration.

Judging by the first HHI, which assumes equal shares, the concentration of viewing in all five DMAs falls below 1,800, in the range the DOJ/FTC *Merger Guidelines* describe as unconcentrated or moderately concentrated.

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16 UHF stations have a smaller broadcast reach than VHF stations and may therefore attract a smaller audience, other things equal. However, the effect of the smaller broadcast reach has been greatly reduced by the carriage of both UHF and VHF signals on cable systems. Some stations may have a smaller potential audience because they are located in a less populous part of the DMA, but that too may be offset by cable retransmission.

17 Source: Appendix C for HHIs; NIELSEN MEDIA RESEARCH, NIELSEN STATION INDEX, DIRECTORY 1994–95 for number of stations.

18 "Rating" means television sets tuned to a particular station or network as a percentage of all television households (TVHHs), whether viewing or not, in a relevant geographic area.

Using viewing shares, three of the DMAs are in the moderately concentrated range and two are just outside it. Not surprisingly, smaller DMAs tend to have fewer television stations and somewhat higher concentration in the competition for viewers, as measured in Table 2.

Even with HHIs exceeding 1,800 in some DMAs, anticompetitive behavior in local markets for viewers is unlikely. Anticompetitive behavior by a broadcast television station would involve reducing the quality of programming below the competitive level. In principle, stations could reduce programming quality by agreeing to reduce expenditures on programming. In practice, payments made for programming are subject to negotiation and cannot be observed by other stations. The problems of coordinating a reduction in programming quality are further complicated by including operators of cable, MMDS and other video systems and providers of video cassettes. These firms may prefer to increase price rather than reduce quality, which would introduce further coordination problems. All these factors make an anticompetitive agreement to reduce programming quality in a local market unlikely. The same factors would impede a "cooperative" or "consciously parallel" or "tacitly collusive" outcome. For these reasons, a given transaction may not be anticompetitive even though the HHI exceeds 1,800. In addition, the correct relevant market may be broader than video programming.

E. Conclusion

The market proposed by the Commission should be expanded to include all providers of video programming, including VDT, MMDS and satellite systems and video cassettes, and perhaps other non-video sources of news and entertainment as well. Competitive issues in this area are best analyzed on a local level. Analysis of several illustrative DMAs suggests that concentration among video suppliers tends to be moderate, and concentration would be lower still if data were available for all the market participants. No single firm is likely to have significant market power, nor is the collective exercise of market power likely in the supply of video programming to viewers. The implications of these results for the ownership rules are explored in Sections VI to VIII below.

III. Advertising Markets

Mergers and joint ventures between competing advertising media, such as cable television networks, newspapers or broadcast stations, are often evaluated to determine whether they would adversely affect competition in relevant markets for advertising. In response to questions raised by the Commission,[19] the present section and Appendix D of this report address the following issues: How should one determine which forms of advertising are in a relevant market? Which other advertising media in fact constrain the prices charged for broadcast television advertising and thus are in the relevant markets in which broadcast television advertising competes? How should concentration in these relevant advertising markets be measured? How concentrated are these relevant advertising markets? If an advertising market is "highly concentrated" under the standards of the DOJ/FTC *Merger Guidelines* (that is, the market has an HHI over 1,800), does this necessarily imply that the exercise of seller market power is likely?

The analysis of advertising markets in the present section is an essential tool used in Sections VI through VIII to evaluate the appropriateness of the Commission's national ownership, local ownership and one-to-a-market rules as ways to deal with issues of competition in advertising. The latter sections of this report conclude that reasonable concerns regarding competition in advertising do not provide a rationale for any of the rules in question. Competition in advertising would in fact increase if the Commission replaced its flat prohibitions with reliance on the competition standard in Section 7 of the Clayton Act.

A. Advertising and promotion

Advertising market definition must start not with an analysis of which media provide effective substitutes for advertisers, but with the question

19 *See* FNPRM, *supra* note 1, ¶¶35–45.

whether advertisers have effective substitutes for advertising itself. Both national and local sellers of consumer goods attempt to increase their sales not only by advertising but also by engaging in promotional activities that substitute for advertising. For example, companies promote their products through telemarketing, payments to retailers for preferred shelf space, coupons and other discounts and rebates.[20] Some sellers of consumer brands do no advertising, at least in some periods. In many cases, advertisers can simply increase their promotional activities in response to an increase in advertising prices. Although the balance of this section focuses on advertising media alone, the interpretation of HHIs must take into account advertisers' broader alternatives.

At both the national and local levels, advertisers generally use an array of media. The roles of the various media used by national and local advertisers are indicated by the data on advertising expenditures in Table 3. Advertisers that use broadcast television typically make extensive use of other media as well.[21] Also, over time there have been substantial shifts in advertising among media, for example, from print to television, and within television from network to syndicated and cable, in response to changes in the relative prices and efficacy of these media.[22]

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20 Substitution between advertising and promotion is discussed further in Appendix D.

21 For national advertisers, *see* Appendix Table E–11. For local data, *see* Cele Otnes and Ronald J. Faber, *An Examination of Variables Influencing Local Advertiser Media Selection*, PROCEEDINGS OF THE 1989 CONFERENCE OF THE AMERICAN ACADEMY OF ADVERTISING, Kim B. Rotzoll, ed. (1989) and Glen T. Cameron, et al., *How Local Advertisers Choose and Use Advertising Media*, JOURNAL OF ADVERTISING RESEARCH, Nov./Dec. 1993, at 39–49.

22 *See*, for example, McCann Erickson time-series data for the advertising expenditure categories in Table 3.

Table 3 U.S. advertising expenditures by medium[23]

Medium	National		Local		Total	
	$ million	percent	$ million	percent	$ million	percent
Broadcast TV					28,020	22.1
4 Networks	10,209	15.4				
Spot	7,800	11.8	8,435	14.0		
Barter	1,576	2.4				
Cable TV	1,970	3.0	594	1.0	2,564	2.0
Radio					9,457	7.5
Network	458	0.7				
Spot	1,657	2.5	7,342	12.2		
Newspapers	3,620	5.5	17,086	28.3	20,706	16.3
Business Papers	3,260	4.9			3,260	2.6
Magazines	7,357	11.1			7,357	5.8
Yellow Pages	1,230	1.9	8,287	13.7	9,517	7.5
Outdoor	605	0.9	485	0.8	1,090	0.9
Direct Mail	13,633	20.5	13,633	22.6	27,266	21.5
Other	13,002	19.6	4,522	7.5	17,524	13.8
Total	66,377	100.0	60,384	100.0	126,761	100.0

B. Advertising product markets proposed by the Commission

1. National advertising product market

In the Further Notice, the Commission tentatively defines a national market for video advertising, thereby excluding all non-video advertising,

23 Source: McCann–Erickson estimates of expenditures by U.S. advertisers including commissions and art, mechanical and production expenses. Other advertising dollar data used in the present report generally relate to gross media revenues. Classified advertising has been removed from local newspaper advertising based on the ratio of classified to total local advertising in NEWSPAPER ASSOCIATION OF AMERICA, FACTS ABOUT NEWSPAPERS 94, 1994. While McCann-Erickson treats all direct mail as national, the present report assumes that direct mail is 50 percent national and 50 percent local.

such as national radio and national print advertising. Furthermore, the Commission's national video advertising market includes only advertising supplied by broadcast networks, program syndicators and cable networks. The Commission tentatively excludes DBS advertising and all national spot advertising carried by broadcast television stations and cable systems (except "perhaps" MSOs). The Commission proposes to include spot advertising in local advertising markets rather than to include national spot in its national video advertising market.[24] The Commission's proposed national video advertising market is too narrow. There is abundant evidence that a correctly defined national advertising market would include national spot advertising and a number of types of non-video advertising such as radio and print (see Appendix D).

The only rationale provided by the Commission for excluding national spot advertising from the market in which network advertising competes is invalid. The Commission's rationale is that "spot sales of advertising to national advertisers are frequently made to allow the national advertisers to reach a more targeted geographic focus and not to reach a national audience (*e.g.*, selling trips to the Bahamas to persons in the snow belt during January)."[25] However, the issue is whether spot advertising would constrain the pricing of a hypothetical monopolist of advertising sold by broadcast networks, cable networks and syndicators. For spot advertising to constrain network advertising, it is sufficient that there be a significant number of advertisers using network advertising for whom spot is a close substitute. It is not necessary that spot and network advertising be close substitutes for all, or even most, users of either spot or network advertising. Thus, the fact that spot advertising is frequently used for purposes for which network advertising is not a close substitute does not imply that spot advertising is not in the market in which network advertising competes.

An analogy may be helpful in understanding the logical flaw in the Commission's argument. Suppose one were to ask whether hair salons that

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24 *See* FNPRM, *supra* note 1, ¶37.

25 *Id.*

serve both women and men belong in the market in which salons that serve only women compete.[26] By the Commission's reasoning, the former would not be in the latter market, because salons that serve both women and men frequently sell services to people (namely, men) for whom salons serving only women are not a substitute. However, it is clear that salons serving both women and men constrain the prices charged by salons serving only women. Thus, the relevant market in which salons serving only women compete would contain salons serving both men and women.

The Commission has tentatively excluded non-video advertising from the relevant national advertising market because the Commission has "no clear evidence on the degree to which all the other alternatives...are economically relevant substitutes for video advertising."[27] The only empirical evidence to which the Commission refers is contained in a single journal article, which in fact sheds no light on market definition.[28]

2. Local advertising product markets

The Commission tentatively defines local advertising markets that include broadcast stations, cable systems, radio stations and local news-

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26 In this analogy, salons that serve women and men play the role of national spot advertising, while salons that serve only women play the role of network advertising.

27 FNPRM, *supra* note 1, ¶36.

28 Barry J. Seldon and Chulho Jung, *Derived Demand for Advertising Messages and Substitutability Among the Media*, 33 QUARTERLY REVIEW OF ECONOMICS AND FINANCE 71–86 (Spring 1993), provides an econometric analysis of substitution among broadcast, print, direct mail and other advertising. The study uses aggregate data for the economy as a whole on output of all goods and services, expenditures on each of the four categories of advertising and price (CPM) indexes for each category of advertising. While the authors conclude that their study suggests that "the various media are fairly good substitutes," the study does not provide a reliable basis for inferences about market definition. It ignores the fact that changes in the economy during 1951–87 are likely to have affected the relative demands for the four types of advertising. Changes in the mix of goods and services produced in the economy, in the relative effectiveness of different types of advertising, in income levels, and in the demographic characteristics of the population are likely to have caused changes in the mix of the four types of advertising that would have been demanded at any given set of relative prices for advertising.

papers.[29] The Commission tentatively excludes magazine, yellow pages, outdoor/billboard, direct mail, telemarketing and other forms of advertising and marketing. The Commission provides no basis for its tentative local advertising product market. Of course, it would be difficult to offer any competitive rationale whatsoever for the Commission's cross-ownership rules relating to broadcast stations, on the one hand, and cable systems, radio stations and local newspapers, on the other, if the local advertising markets in which broadcast stations compete were defined more narrowly than the Commission now proposes. In fact, the product market proposed by the Commission is too narrow. The empirical evidence presented in Appendix D indicates that other forms of advertising, such as yellow pages, outdoor and direct mail, are substitutes for video, radio and newspaper advertising.

C. Evidence on advertising product markets

Appendix D presents evidence on substitution by national advertisers among broadcast television spot, broadcast network, syndication, cable network, cable spot, radio network, radio spot, newspaper, magazine, yellow pages, outdoor and direct mail advertising. Similarly, the appendix presents evidence on substitution by local advertisers among broadcast television spot, cable spot, radio spot, newspaper, yellow pages, outdoor and direct mail advertising.

The evidence in Appendix D refutes the Commission's tentative conclusion that national spot advertising does not compete in the national advertising market in which broadcast network, syndication and cable network advertising compete. Similarly, the evidence refutes the Commission's conclusion that radio, newspaper and magazine advertising are not substitutes for national video advertising, even though radio and newspaper advertising are substitutes for local video advertising. There is persuasive evidence that radio and print advertising are substitutes for video advertising, and there is no basis—empirical or otherwise—for a conclusion that such substitution is important only for local advertisers.

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29 *See* FNPRM, *supra* note 1, ¶43.

Furthermore, there is no evidence to support a conclusion that other forms of advertising—including yellow pages, outdoor and direct mail—do not constrain the prices of video, radio and newspaper advertising. In sum, advertising markets are likely to be broader than those tentatively identified by the Commission and HHIs measured in the tentative markets must be interpreted in light of this fact.

D. Concentration

This section analyzes concentration in the advertising markets in which the national spot advertising sold by television stations competes or is alleged to compete. This section then analyzes concentration in the advertising markets in which the local spot advertising sold by stations competes. Because many types of advertising are substitutes for television spot advertising, concentration is computed here for broad product markets. However, in order to determine the robustness of this report's policy conclusions with respect to alternative definitions of relevant advertising product markets, the report also calculates concentration for narrower "markets."

In measuring shares for television stations and other local advertising media that sell to both national and local advertisers, there are two ways to measure advertising revenues. First, one could measure revenues earned by local media from national advertisers and use these data to measure the shares of local media in the national advertising market. Similarly, one could measure revenues earned by local media from local advertisers and use these data to measure the shares of local media in local advertising markets.

Second, one could measure revenues earned by local media from both national and local advertisers and use these same numbers to measure the shares of local media in the national advertising market and in local advertising markets. The justification for using both national and local revenues in calculating shares of local media is that, for each local advertising vehicle, there is unlimited supply-side substitution between sales to national and to local advertisers. Advertising time or space is exactly the same regardless of whether it is sold to a national advertiser or a local advertiser. Put differently, the *capacity* of a station to supply advertisers of either type can be measured by its combined sales of advertising of both types. In addition, national advertisers can substitute between national advertising time or space purchased, for example, from national firms representing local stations, and local advertising purchased at the local level from broadcast stations. As a result, revenues from sales of national and local advertising combined are likely to provide the most useful measure of competitive significance for the purpose of calculating concentration in advertising.

This report presents HHIs calculated based on each of these two assumptions about the revenues that should be used to compute shares, although the second assumption is preferred. HHIs based on shares calculated using the first approach are called "national sales" and "local sales" HHIs, respectively. HHIs based on shares calculated using the second approach are called "capacity" HHIs.

To calculate HHIs that are relevant to current market conditions, ownership has been updated to 1995 where possible. Thus, HHI calculations reflect 1995 ownership of advertising media and 1993 or 1994 revenues for those media.

1. National advertising market

Concentration has been calculated in the following national advertising "markets:"

- Video advertising as tentatively defined by the Commission, including broadcast network, syndication and cable network advertising, but excluding broadcast and cable national spot advertising.
- Video advertising, including broadcast network, syndication, cable network, broadcast national spot and cable national spot advertising.
- Video and radio advertising.

- Video, radio, newspaper and magazine advertising.
- Video, radio, newspaper, magazine, yellow pages and outdoor advertising.
- Video, radio, newspaper, magazine, yellow pages, outdoor, direct mail and miscellaneous advertising.

In order to calculate concentration in national advertising, one must make an assumption about how to attribute revenue from local media, including broadcast spot, cable spot, radio spot, local newspaper, outdoor and yellow pages. It is assumed that in order to compete in the national advertising market, a supplier using local advertising media must offer a set of local media that covers a combined area that includes something like 75 percent of households nationwide.[30] The "supplier" could be a media owner, an advertising sales representative or a buyer that assembles its own set of local media. For expositional purposes, suppose that suppliers of broadcast television national spot advertising are representative firms, examples of which include Blair Television, Katz Communications and Telerep. Suppose also that national advertisers make their national spot purchases based on competitive bids. In that case, in order to be counted as an independent competitor, a representative firm must represent stations with a DMA coverage[31] of 75 percent of households. Given the combined coverage of commercial stations in the country, there could be eleven independent bidders offering broadcast television national spot in the relevant advertising market.[32] For the purposes of the HHI calculations in this report, it is assumed that seven station representatives have equal shares of broadcast television spot advertising.

These spot advertising revenues are attributed to the advertising sales representatives, rather than to the station owners, because no entity owns

30 *See infra*, note 205, Appendix D.

31 "Coverage" of seventy five percent means that seventy five percent of all U.S. television households can be reached by this means.

32 *See* Section VI, *infra*. Combined coverage is 866 percent; 866 divided by 75 is 11.5.

stations with even half the coverage needed to be a supplier of national spot in the relevant market. What each station owner supplies is an input into the production of national spot advertising. The input is advertising delivered to DMAs with 25 percent or less of DMA households.

For similar reasons, it is assumed that there are two national advertising representative firms supplying cable national spot advertising, seven supplying radio national spot advertising, two supplying national newspaper advertising, two supplying national yellow pages advertising, and two supplying national outdoor advertising.

The rationale for assuming that two firms supply cable national spot is that virtually all areas of the country can be reached by both a cable system and a regional cable sports network. To a large extent these systems and networks currently rely on two representative firms, National Cable Communications and Cable Networks, Inc., as well as Liberty Sports Sales, to make sales to national advertisers.

Given the large number of radio stations in virtually all urban areas of the country, there could be many suppliers of radio national spot advertising. It is assumed conservatively that there could be seven.

The rationale for assuming that two firms supply national advertising in newspapers other than *The Wall Street Journal* and *USA Today*, which are treated as national newspapers, is that a number of cities have two independently owned and operated daily newspapers and there are national as well as local weekly papers. Similarly, the rationale for assuming that two firms supply national yellow pages advertising is that a significant portion of the U.S. is reached by two or more yellow pages directories, including directories from the local telco, from other telcos and from non-telco firms such as R. H. Donnelley. The rationale for assuming that two firms supply national outdoor advertising is that in most areas of the U.S. there appear to be two principal suppliers of outdoor advertising.

The direct mail industry is highly fragmented. Advo, which specializes in ZIP-code targeted saturation mailing of materials for multiple advertisers in a single package, accounted for about 3 percent of direct mail advertising in 1993. It appears that no other firm accounted for even 1 percent.[33] Because of the fragmented structure of direct mail, in computing HHIs it is assumed that, with the exception of Advo, direct mail is supplied by many companies, each of which has a negligible share of direct mail advertising.

Table 4 summarizes the HHIs in each of a number of national advertising product "markets," computed under the assumptions described above. For each "market" there are two HHIs, one that uses total advertising revenue for local media and one that uses only national advertising revenue for those media. The table proceeds from the Commission's unduly narrow tentative market to more realistic broader markets.

Table 4 HHIs for alternative national advertising product "markets," 1993[34]

Product "market"	National sales	Capacity
Broadcast TV network, syndication and cable network	1,666	1,666
National video*	850	719
National video & radio	753	508
National video, radio, magazines & newspapers	352	498
National video, radio, magazines, newspapers, yellow pages and outdoor	329	444
National video, radio, magazines, newspapers, yellow pages, outdoor, direct mail and miscellaneous	134	198

*National video includes broadcast TV network, syndication, cable network, broadcast national spot and cable national spot.

Table 4 demonstrates that regardless of how the relevant product market for national advertising is defined, concentration is moderate (HHI be-

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33 Other leading suppliers of direct mail advertising, include DIMAC, whose major clients include AT&T and American Express, with 1993 revenues of $80 million, and DiMark, whose major clients include Blue Cross associations and insurance companies, with 1993 revenues of $39 million. DIMAC, *1994 SEC Form 10-K*, and *DiMark, 1994 SEC 10-K*.

34 Source: Appendix Tables E–1 to E–6.

tween 1,000 and 1,800) or low (HHI below 1,000) under the standards of the DOJ/FTC *Merger Guidelines*. In a properly-defined national advertising market, the HHI is well under 1,000. Thus, changes in the Commission's ownership rules that have any impact on national advertising pose no threat to competition.

2. Local advertising markets

For illustrative purposes, advertising concentration in five local markets are calculated in this report: New York, Cleveland, Portland, Richmond and Amarillo. The selection of these local markets is discussed above in connection with Table 1.

For the purpose of these illustrative calculations, it is assumed that DMAs are the relevant geographic markets in which broadcast stations compete in selling advertising. The general relevance of DMAs as the geographic markets in which television stations compete in sales to local advertisers is suggested by the fact that the ratings data that stations, sales reps, advertisers and advertising agencies typically purchase from A.C. Nielsen and rely on in marketing and purchasing spots pertain to DMAs. Furthermore, even where there are Grade B contour overlaps for stations in adjacent DMAs, it appears that a typical advertiser that is buying national spot buys time on a station in each DMA of interest, rather than relying on coverage from stations in adjacent DMAs. Also, Setzer and Levy, who interviewed advertising agency executives, report that aside from superstations, "stations that are imported as distant signals by cable systems reduce local station audiences but benefit little, in general, from their additional audiences because much of their advertising is local."[35] Thus, it appears that stations in adjacent DMAs that have overlapping Grade B contours do not compete in selling advertising.

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35 Florence Setzer and Jonathan Levy, *Broadcast Television in a Multichannel Marketplace*, FCC Office of Plans and Policy, June 1991, at 129. *See* also CBS, 1994 *SEC Form 10-K*, at 7: "Competition with CBS's owned radio stations occurs primarily in their individual market areas, although on occasion stations outside a market place signals within that area. While such outside stations may obtain an audience share, they generally do not obtain any significant share of the advertising within the market."

In each DMA, shares and concentration are calculated for the following alternative advertising product "markets":

- The "market" tentatively proposed by the Commission, which includes only broadcast television, cable television, radio and newspapers.
- The preceding "market" plus yellow pages and outdoor.
- The preceding "market" plus direct mail and miscellaneous local advertising.

Because of lack of data, some smaller broadcast stations, cable systems, newspapers and yellow pages suppliers are excluded from the market share and concentration calculations.[36] Because numerous smaller suppliers of advertising are omitted from the tables. Other things equal the HHIs overstate actual concentration levels.

Table 5 provides HHIs for the three alternative advertising product "markets" in each of the five selected DMAs, as well as in an area consisting of the combined Cleveland and Youngstown DMAs. The Cleveland and Youngstown DMAs are adjacent, and there are Grade B contour overlaps between stations in Cleveland and Youngstown. While the relevant local advertising market in which Cleveland stations compete does not in fact appear to include Youngstown, HHIs were calculated for Cleveland and Youngstown combined to demonstrate that the effect of combining adjacent DMAs would typically be to *reduce* concentration.

Table 5 indicates that in a product market that includes video, radio, leading daily newspaper, yellow pages, outdoor, direct mail and miscellaneous local advertising, HHIs for "capacity" are typically substantially less than 700. They are only modestly higher when they are based solely on

36 For example, the HHI calculations for Cleveland and Youngstown combined include only the four leading daily newspapers, which account for approximately 60 percent of average weekly newspaper circulation. More than 50 other newspapers together account for the remaining 40 percent, and no one of these accounts for over 5 percent. See Appendix Table F-17.

local advertising revenue. In the terminology of the *Merger Guidelines*, concentration in markets with HHIs below 1,000 is "low."

If direct mail and miscellaneous local advertising are excluded from the product market, concentration remains in the "low" range for New York and is in the "moderate" range (1,000 to 1,800) for the remaining DMAs based on the capacity measure.

If the product "market" is limited to video, radio and leading daily newspapers, as proposed by the Commission, concentration remains in the "low" range for New York and in the "moderate" range for Cleveland. The HHI is above 1,800 in the three smaller DMAs. However, the fact that an HHI exceeds 1,800, even if the market were properly defined, does not necessarily imply that the exercise of market power is likely, for reasons that are explained in the next two sub-sections.[37]

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37 It is widely recognized that the HHI threshold of 1,800 specified in the *Merger Guidelines* is not based on empirical evidence concerning the relationship between concentration and the likelihood that market power will be exercised. *See* Paul A. Pautler, *A Review of the Economic Basis for Broad-Based Horizontal-Merger Policy*, 28 ANTITRUST BULLETIN 571–651 (Fall 1983); Noel D. Uri and Malcolm B. Coate, *The Department of Justice Merger Guidelines: The Search for Empirical Support*, 7 INTERNATIONAL REVIEW OF LAW AND ECONOMICS 113–20 (1987); and F. M. SCHERER AND DAVID ROSS, INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE, (3rd ed.1990).

Table 5 HHIs for alternative DMA advertising product "markets," 1994[38]

Product "market"	DMA	Local sales	Capacity
Video, radio, & newspaper	New York*	722	703
	Cleveland	1,370	1,250
	Portland	2,244	1,839
	Richmond	2,299	1,924
	Amarillo	2,500	2,505
Video, radio, newspaper, yellow pages & outdoor	**New York***	**889**	**758**
	Cleveland	**1,275**	**1,106**
	Portland	**1,791**	**1,485**
	Richmond	**1,806**	**1,519**
	Amarillo	**1,742**	**1,722**
Video, radio, newspaper, yellow pages, outdoor, direct mail, & miscellaneous	New York*	393	284
	Cleveland	565	418
	Cleveland & Youngstown	529	361
	Portland	797	564
	Richmond	811	583
	Amarillo	821	632

*1993 revenue

E. Substitutes that are not included in the market

1. National and local advertising markets are closely related

While it is usual to define separate national and local markets for advertising, there is both supply-side and demand-side substitution between these markets. This implies that national media have a role in constraining pricing in local advertising markets, and similarly that local media have a role in constraining prices in national advertising markets. This in turn implies that, other things equal, the potential for competitive problems in national and local advertising markets is even less than is sug-

38 Source: Appendix Tables F-1 to F-16.